Advancing Asset Management In Your Utility:

A "Hands-on" Workshop Approach

Thursday, March 31 & Friday, April 1, 2005
Four Points by Sheraton
Pittsburgh North
910 Sheraton Drive
Mars. PA 16046

"America's water infrastructure is critical to our nation's environmental, economic, and social health. To help sustain our infrastructure, we should all be striving towards the goal of making Advanced Asset Management concepts and technologies the normal and expected condition of the service, everywhere".

Benjamin H. Grumbles, Acting Assistant Administrator for Water, USEPA







USEPA:

- **♦ Region III**
- ♦ Office of Wastewater Management Contract Content Providers:
- ♦ Parsons Water & Infrastructure
- **♦ GHD Advanced Asset Management**

About Our Presenters

Mr. Steve Allbee - USEPA Project Director, Gap Analysis; primary author, USEPA's The Clean Water and Drinking Water Infrastructure Gap Analysis; 25 years EPA - development of financing programs; BA, MA, MPA.

Mr. Roger Byrne - Principal, Global Service Manager, GHD's Asset Management Group, Melbourne, Aus; principal author, International Infrastructure Management Manual; 30 years infrastructure management experience; author of over 40 manuals and guides; has executed over 100 Asset Management "Best Practice" audits; BCE, NPRE.

Mr. Duncan Rose - Vice President & Technical Director - Asset Management Group, GHD LLC; Former city/county manager; co-author of WEF's textbook, Managing the Water and Wastewater Utility; 30 years state & local government management; Adjunct Faculty, Florida State University, Askew School of Public Policy; BA, MSP, MAPA.

Overnight Accommodations:

PWEA has reserved a limited block of rooms at the Four Points by Sheraton Pittsburgh North for attendees at a discounted single rate of \$79.00. The reservation deadline is March 9, 2005. After this date, reservations will be accepted on a rate and availability basis. To make your reservation, call I-888-627-8175. Be sure to mention Pennsylvania Water Environment Association when making your reservation to get the discounted rate.

Four Points by Sheraton Pittsburgh North 910 Sheraton Drive Mars, PA 16046 1-888-627-8175

For additional information please visit:

♦ www.pwea.org

Workshop handouts and materials can be found at www.epa.gov/owm/featinfo.htm

Registration Form

_	Before March 1st	On-site
☐ Member	\$250.00	\$300.00
■ Non-Members	\$275.00	\$325.00
Total		
Registration Fees (Fees inclunch and breaks):	lude course materials, cor	ntinental breakfast,
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Send Registration Form with Payment to: **Tami Brehm**, Meeting Manager Pennsylvania Water Environment Association PO Box 8820 Harrisburg, PA 17105-8820 Phone (717) 558-7862 Fax (717) 558-7841 tbrehm@pamedsoc.org

- ♦ Seats are limited, please register as early as possible.
- ♦ Make checks payable to "PWEA"
- ♦ Workshops will begin promptly at 8:00 am each day.

The Challenge:

Over the past half century, America has spent trillions of dollars building some of the finest infrastructure that history has ever seen. Indeed, this infrastructural investment has played a substantial role in the sustained wealth, prosperity, and quality of life



Senior utility managers

of our country. But in many communities, this infrastructure is severely stressed from over-use, under-funding of maintenance and renewal. and aging.

A comprehensive approach to managing our capital assets is overdue - one that brings "state of the practice" advanced asset management ("AAM") concepts, tools, techniques, and technologies to bear on managing for cost-effective performance. need better tools today This approach, first and foremost, is one that focuses relentlessly on pro-

viding sustained performance of value to the customer at the lowest life-cycle cost and at an acceptable level of risk to the organization.

The Focus:

The great French author, Victor Hugo, once observed, "An invasion of armies can be resisted, but not an idea whose time has come." Public sector managers have been managing assets for decades. However, it is clear that what we have been doing in the past will not be sufficient to address the growing and increasingly complex challenges that lie ahead. Practical, advanced techniques for better managing assets have been developed and refined in both the private sector in the US and in water and wastewater agencies around the world. Management thinking is centered on long-term effectiveness, service sustainability, and effective environmental management. How can these advanced asset management concepts, tools and techniques be most effectively transferred into the water and wastewater industry, more specifically, into your agency? Where to start? How to proceed? How to select appropriate tools?

The Workshops:

The AAM challenge for US agency officials is one of "knowledge transfer". For this reason, these workshops have been designed as an extensive "hands-on" experience. Each workshop:

- ♦ Incorporates a real-world "storyline" to realistically demonstrate an advanced asset management way of approaching difficult asset-driven problems.
- ♦ Is built around participant exercises that demonstrate the concepts, techniques and tools of advanced asset management.
- ♦ Is centered on "case-based" mentoring by expert asset management practitioners. The agenda is built around five core questions. The workshops focus on demonstrating, step-by-step, how an agency would select and deploy "Best Appropriate AM Practices" that are best suited to that agency.

Agenda Highlights

Day ONE (8:00 - 4:30)

Introductions, Storyline, Background And Context

- ♦ Introduction Of Storyline
- ♦ The Changing Utility Industry
- ♦ The Emerging Utility Of Tomorrow

Overview Of Fundamental Concepts And Core Practices

- ♦ A Definition Of AAM
- ♦ The AAM Paradigm
- ♦ The Nine Building Blocks Of AAM
- ♦ Managing The Asset Base's "Potential To Fail"
- ♦ Payoffs And Benefits, Downsides

Storyline And Worksheets - Tom's Very Bad Day Core Question I: What Is The Current **State Of My Assets?**

- ♦ The Role of Expert Judgment The "Delphi Group"
- ♦ Building a "Process Layout" Schematic
- ♦ Creating The "Asset Hierarchy"
- ♦ Defining The "Data Standard"
- ♦ Initial Condition Analysis, Remaining Physical Life
- ◆ Valuation/Asset Consumption/Financial Disclosure From a GASB Perspective

Core Question 2: What Is My Required "Sustainable" Level Of Service (LOS)?

- ♦ What Is "LOS"? Why Do It?
- ♦ How It Works (Strategic Level Versus Operations
- ♦ A "Balanced Scorecard" Approach

Core Ouestion 3: Which Assets Are Critical To Sustained Performance?

- ♦ Understanding How My Assets Can Fail
- ♦ What The Likelihood Of Failure Is
- ♦ What The Consequences Are
- ♦ How To Measure Our Agency's "Business Risk Exposure"?

Core Question 4: What Are My Best Minimum Life-Cycle-Cost CIP And O&M Strategies?

- ♦ What Alternative "Treatment" (Management) Options Are Feasible?
- ♦ Which Is The Best Strategy "Optimal Renewal Decision Making"?

Discussion, Q & A And Feedback

Day TWO (8:00 - 3:45) Summary Of Day 1, Outline Of Day 2 Core Question 4: O&M (Continued)

- ♦ Using AAM To Drive Operations And Maintenance
- ♦ Moving Systematically Into Reliability Centered And Condition-Based Maintenance

Core Question 4: CIP (Continued)

- ♦ Using AAM To Drive The CIP
- ♦ Strategic CIP Validation
- ♦ Building Your First Asset Management Plan ("AMP") For The System
- ♦ Balancing CIP And O&M Requirements
- ♦ The Strategic CIP Business Plan

Core Question 5: What Is My Best Long-**Term Funding Strategy?**

- ♦ So, Valuation Really Does Matter?
- ♦ Determining A Sustainable Renewal Funding Level
- ◆ Effectively Telling The Funding Story
- ♦ The "Whole Of Business" Perspective Using AAM For Rate Setting & Budgeting

Focus Topic I: Deploying An AAM Program

- ♦ The Three Fundamental Deployment Strategies
- ♦ "Gap Analysis" Benchmarking & Developing The AAM Improvement Program
- ♦ The Human Side
- ♦ The Political Side
- ♦ Implementation Work Plans Lessons Learned

Focus Topic 2: Meeting The IT Challenge - Toward An Enterprise Asset Management System ("EAMS")

- ♦ Defining "Work Processes"
- ♦ Defining "System Functionality"
- ♦ Defining Data Needs And Data Flows
- ♦ Developing An EAMS Work Plan

Closing Summary, Questions, Comments, **Evaluation, Discussion Of Basic Audit**